

REMARKS

This is intended as a full and complete response to the Office Action dated January 28, 2003, having a shortened statutory period for response set to expire on April 28, 2003. Claims 1-17 are pending in the application. New claims 18 and 19 have been added. Please reconsider the claims pending in the application for reasons discussed below.

Drawings

The drawings stand objected to as failing to comply with 37 CFR § 1.84(p)(5) because the following reference sign is not mentioned in the description: "262" in Fig. 9. Applicant has amended the specification to correct this error.

The drawings stand objected to as failing to comply with 37 CFR § 1.84(p)(4) because "Ws" has been used to designate both the width of the flow slots or openings and the distance between the radially innermost corner portions. Applicant has amended the specification to correct this error, *i.e.*, the "W_s" on page 8 now reads "W_d".

Specification

The disclosure is objected to because on page 10, lines 6 and 17, "256" should be change to --260-- or proper reference to the drawings. Applicant has amended the specification in accordance with the Examiner's comments.

Claim Objections

Claims 8, 11, 16, and 17 stand objected to because of informalities. Where appropriate, Applicant has amended the claims for clarification in accordance with the Examiner's comments.

§ 112

Claims 1-17 stand rejected under 35 U.S.C. § 112, second paragraph. Where appropriate, Applicant has amended the claims for clarification in accordance with the Examiner's comments.

§ 103(a)

Claims 1-2, 5, 7-13, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Koves, et al.*, U.S. Patent No. 5,209,908 in view of *Nagaoka*, EP 0 483 975. The Examiner states that *Koves* discloses the limitations of claim 1, except it

is silent as to whether the "side wall portions on at least some said conduit members are angled away from each other in generally radially outward direction, with an included angle less than truly radial relative to the axis of the vessel." However, the Examiner states that such a configuraton would be inherent.

Applicant respectfully traverses this rejection. *Koves* discloses extending perforations into the back side of a distribution conduit that abuts the vessel. The modified apparatus has greatest application to scallop-shaped conduits. The perforations ventilate the area between the scallop and the vessel holding the scallops. As stated in the Background, the flow distribution provided by the scallop conduit is non-uniform and more flow will take place at the location on the scallops where their convex surface is closest to the center pipe. As a result, fluid contacts the particulate bed unevenly, thereby requiring the particulate bed to be replaced more frequently. On the other hand, the present invention provides a fluid conduit that effectively creates a particulate bed having uniform radial thickness, thereby providing a uniform pressure differential along the length of the permeable wall of the fluid conduit. *Nagaoka* discloses a device for holding catalyst in a radial flow reactor. *Nagaoka* is distinguishable in that the device is used to retain the catalyst, while the fluid conduit of the present invention and *Koves* does not. The references, neither alone nor in combination, teach, show, or suggest a pair of generally radially extending side wall portions on at least some of said conduit members being angled away from each other in a generally radially outward direction but at an included angle which is less than if they were truly radial relative to the axis of the vessel, as recited in claim 1 and claims depending therefrom. Also, the references, neither alone nor in combination, teach, show, or suggest inner wall portions of said conduit members having at least a portion of their surface formed by screen members which have flow openings which are of a dimension less than the diameter of the particulate material which forms a uniform thickness particulate bed and which is located in an annular space between the inner wall portions of the conduit members and the outer wall of the axially mounted member, as recited in claim 1 and claims depending therefrom. Therefore, Applicant believes the claims are in condition for allowance and respectfully requests allowance of the same.

Claims 3-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Koves* in view of *Nagaoka*, as being applied to claim 1 above, and further in view of *Evans*, U.S. Patent No. 5,118,419.

For the reasons discussed above with respect to claim 1, Applicant believes claims 3 and 4 are in condition for allowance.

Claim 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Koves*, in view of *Nagaoka*, as applied to claim 1 above, and further in view of *Schuurman*, U.S. Patent No. 4,540,547.

For the reasons discussed above with respect to claim 1, Applicant believes claim 6 is in condition for allowance.

Claims 14-15 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Koves* in view of *Nagaoka*, as applied to claims 1, 9 11-13, and 16 above, and further in view of *Farnham*, U.S. Patent No. 4,374,094.

For the reasons discussed above with respect to claim 1, Applicant believes claims 14-15 and 17 are in condition for allowance.

Conclusion

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the method or apparatus of the present invention. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the same be allowed.

Respectfully submitted,



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